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# ON THE JOB TRAINING

## Program Manual



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Employment Diversity in Highway Construction  
Vermont Agency of Transportation





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*Just make sure this is what you want to do. This work isn't easy. You must be up for long days, hot days, cold days, and rainy days. The sense of accomplishment you gain from being part of a quality project is worth the effort. I can drive down Shelburne Road and say to myself, "I helped build this road."*

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*“Love my job and hope to stay on. Best job I’ve ever had. I have a large respect for all the wonderful people I work with.”*

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## PROGRAM OVERVIEW

Training and upgrading of minorities and women toward journeyman status is a primary goal of this Equal Employment Opportunity affirmative action program. It provides an avenue for contractors working on federally-funded projects to diversify their workforce. Over the years, the program has helped transform the highway construction workforce in Vermont.

To accomplish this, the Vermont Agency of Transportation (VTrans) has established procedures in accordance with 23 CFR 230.111 to add employee traineeship hours as a contract requirement on selected contracts. The details of these training requirements are outlined in the Training Special Provisions found in section 634 of the VTrans *Standard Specifications for Construction* and pages 35-37 of this manual.

To fulfill this contract requirement, the contractor must make every effort to identify eligible candidates by recruitment through public and private sources. Contractors may, in some situations, choose to upskill current employees who meet OJT eligibility requirements. In addition to providing training, the contractor will make an effort to retain the trainee after successful completion of training hours.

Contractors should use this *On-The-Job Training Program Manual* as a guide to prepare for and implement the training program. The training provided should meet the workforce needs of the project; introduce (or advance) the trainee to the highway construction field; and include the number of training hours needed to fulfill the contract requirement. The contractor is expected to begin the recruitment process well before the start of the project. Recruitment tips and statewide contacts are provided in this manual (pages 21-33, Hiring and Retaining a Diverse Workforce) and on our website. As a courtesy, our office can help you with the recruitment process. Please contact us if you need assistance.



## QUESTIONS OR CONCERNS?

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## RECRUITMENT & ELIGIBILITY

When selecting a trainee, the contractor should use the following criteria:

- A trainee can be a current employee or someone new to your workforce;
- A trainee must be at least 18 years old; and
- A trainee must be a woman, minority or disadvantaged person. A disadvantaged person is defined as someone who is participating in a Workforce Innovation & Opportunity Act (WIOA) program through a state Department of Labor. The disadvantaged person must meet the WIOA “priority populations” requirement.

Ideally, a trainee should also be someone...

- Who has experience or a strong interest in highway construction;
- With reliable transportation; and
- Willing to learn and work hard.

Keep in mind:

- The applicant must complete an *OJT Program Application* and be approved by our office to be part of the training program;
- No applicant will be accepted as a trainee in any classification for which he/she has successfully completed a course leading to journey-worker status or in which he/she has been gainfully employed;
- No applicant who has previously been in the VTrans OJT Program will be accepted for a second training unless it is in a position which upgrades him/her from semi-skilled to skilled craft status; and
- An applicant may enroll in a maximum of two training programs. If the applicant has at least three years experience in the industry and their first OJT position was an advanced level training like Foreman Assistant, Advanced

Bridge Construction or Construction Supervisory, they will not be eligible for a second training. At this point, it is assumed they can find work without the help of the OJT program.

The contractor should use community organizations and resources which are most likely to reach women and minority populations, like those included in the Hiring and Retaining a Diverse Workforce section of this manual (pages 21-33). Contractors can also reach out to the Career Resource Center closest to the project to ask about WIOA participant referrals. Career Resource Center locations and contact information can be found here: <https://labor.vermont.gov/workforce-development/find-your-local-career-resource-center>.

While contractors are required to do their own marketing and recruitment for OJT positions, we can help with these efforts.

Our office works closely with Career Resource Centers and Vocational Rehabilitation Offices throughout the state, Vermont Works for Women, and other organizations to provide referrals to contractors.

It is important to document “good faith efforts” towards recruitment of an eligible candidate. Documentation may include copies of advertisements and internal postings, and dates and names of organizations contacted for referrals. Civil Rights staff may be asking to see this documentation during a compliance review.



## PARTICIPANT ASSESSMENT & INTERVIEW PROCESS

Prior to enrollment in the OJT Program, prospective participants are assessed by office to determine eligibility and readiness and are given an orientation to the program. They also go through the normal application and interview process with the contractor. This happens two different ways:

- If we meet prospective trainees through our recruitment and marketing efforts, we will have them complete a program application and hold an assessment meeting. If we determine the candidate is eligible and “ready”, we refer them to contractors for a job interview. *Please note that we do not conduct any kind of background check on potential trainees, other than to verify WIOA participation, if needed. Contractors must follow their normal hiring procedures when considering OJT applicants.*
- If the contractor locates a potential candidate, they should have them complete an employment application and conduct an initial interview. If the contractor believes the candidate is qualified to participate in the OJT program, they should have them complete the OJT application online ([https://appengine.egov.com/apps/vt/aot/on\\_the\\_job\\_training](https://appengine.egov.com/apps/vt/aot/on_the_job_training)) and refer them to the OJT Coordinator for an assessment.

During the assessment process, we may offer the candidate an opportunity to attend industry related training, like flagging or OSHA 10. We may also refer them to other supportive services as needed.

## SELECTING A TRAINING

Select a trainee classification (see pages 7-20) that meets the needs of the project, will be in use for a reasonable duration, and meets the interests of the trainee. Contractors should also evaluate how each training position will affect the company’s EEO requirements and the goal of increased participation of women, minorities and disadvantaged persons in the skilled occupations of the highway construction industry. Each job classification selected should be one which adds to the overall strength and value of the company’s workforce. Although certain “entry level” positions are typically chosen for OJT positions, contractors should not overlook the full range of potential job classifications. In the event that there is not a trainee classification in this manual that is suitable, the contractor can work with the OJT Program Coordinator to develop a training classification that suits the project and the trainee’s interests.

If it is a customized training, a job description must be approved by the OJT Program Coordinator prior to the OJT enrollment.

## WAGE RATES

Trainees will be paid at least 60 percent of the appropriate minimum journey-worker’s rate (for the training classification in which he/she is enrolled) specified in the contract for the first half of the training program, at least 75 percent for the third quarter of the training program, and at least 90 percent for the last quarter of the training program. The ending wage rate should be equal to or higher

than the federally-mandated Davis-Bacon wage rate for that classification. **In no case will the trainee be paid less than the prevailing rate for a general laborer as shown in the contract wage decision.** Trainee wage rates are subject to the approval of the OJT Program Coordinator prior to the start of the training.

## WORK HOURS

Given the nature of the work, the trainee is expected to work the hours required by the project. This typically means working more than 40 hours per week and may include weekend and/or holiday work.

## SELECTING THE TRAINER

The supervisor(s) selected to train the OJT trainee is critical to the success of the OJT effort. The best trainer will be someone who can communicate his or her knowledge of the skill area effectively and who sincerely wants to help someone learn the trade. This may not be the person with the most experience, highest supervisory position or the most formal education. It is important that trainers understand the importance of the OJT positions and be able and willing to help trainees complete the training program.

## ORIENTATION & ENROLLMENT

**Prior to approval of an OJT**, the contractor must complete an *OJT Program Enrollment Form* so it may be approved by the OJT Program Coordinator. This form does not need to be signed until the end of the probationary period. The start date of the probationary period should be used as the trainee's start date. Until the OJT Program Coordinator approves an OJT start date, it is not effective and will not be retroactive.

**Before the OJT trainee starts working on the assigned project, the contractor should provide the trainee with a company orientation covering the following subjects:**

- Company policies and procedures, including EEO related policies and complaint procedures;
- Who the company's EEO Officer is;
- How employee wages and benefits work;
- How employees can apply for promotions;
- Seasonality of construction work;
- Adverse weather conditions under which work may occur;
- That the trainee may be required to work extra hours, including possibly weekends and/or night shifts;
- Appropriate work clothing/shoes;
- Performance and work ethic expectations;
- Safety expectations;
- Who the trainee reports to and who will provide them instruction; and
- Who the trainee needs to notify if they are unable to come to work or need to leave early.



Upon satisfactory completion of the required two-week probationary period and subject to the approval of the OJT Program Coordinator, the trainee will be officially enrolled in the OJT Program. The OJT enrollment meeting will be conducted at the project field office with the trainee, the contractor's OJT supervisor, the VTrans Resident Engineer and the OJT Program Coordinator.

**The following topics/issues will be covered at the on-site OJT enrollment meeting:**

- The purpose of the OJT program;
- Alterations to the job classification/training plan for the trainee, if needed;
- Work duties outside of the training plan;



- Off-site training;
- Weekly progress reports;
- The company's procedures for addressing harassment and discrimination complaints; and
- The role of the VTrans Office of Civil Rights & Labor Compliance office moving forward.

Once a trainee is enrolled in a training program, the individual must be trained in the designated trade for the duration of the contract whenever that trade is in use on the project until the trainee has completed the approved training program.

## WEEKLY OJT PROGRESS REPORTS

**Upon completion of each week of the training program**, the contractor is required to submit via email or Doc Express a completed, signed *OJT Weekly Progress Report* to the OJT Program Coordinator and the Resident Engineer on the project. A copy should be given to the trainee as well. Trainees should be evaluated by their immediate supervisor(s). The Progress Reports are to be signed by both the trainee and the trainee's supervisor. This form is available online at: <https://vtrans.vermont.gov/civil-rights/doing-business/contractors-center/information>. The Weekly Progress Report is to be an accurate reflection of the trainee's work hours, phases of training, and progress to date.

These reports serve the following purpose:

- They are the method of reimbursement of training hours for the contractor;
- They are used to record and report trainee status to the OJT Program Coordinator; and
- They provide an opportunity for the trainee and supervisor to discuss any areas which need improvement and/or areas in which the trainee excels.

It is the responsibility of the contractor to complete and distribute the Progress Reports accordingly. If OJT Weekly Progress Reports are not submitted to

the Resident Engineer, no payment will be made to the contractor for Item 634.10, Employee Traineeship. By not furnishing the Progress Reports on a weekly basis, the contractor risks being cited for non-compliance by VTrans.

OJT Progress Reports should be submitted to the Resident Engineer and OJT Program Coordinator each week until the training is completed.

## SITE VISITS

Periodic site visits will be made by a representative of the Office of Civil Rights & Labor Compliance to check on the trainee's progress. These visits will be arranged through the project Resident Engineer. We try to schedule these at a time that is least disruptive to the project.

## CHANGE IN OJT HOURS ON A PROJECT

At times, during the course of a project, a contractor may have the need to request the transfer of training hours from one project to another or to add training hours to a project. This type of request may be needed if:

- A different (federally-funded VTrans) project offers a more suitable training opportunity;
- The current project is nearing completion sooner than anticipated and there are a number of training hours left to be fulfilled; or
- Additional hours are needed on the current project to accommodate a specific training classification.



For such requests, the *OJT Program Hours Change Request Form* should be used. Please note that this type of request must be approved by the Resident Engineer on the project(s) and the OJT Program Coordinator before implementation.

## OFF-SITE TRAINING OF AN OJT

Nothing in this program prohibits a contractor from providing off-site training on a temporary basis on another VTrans federally-funded project. The work on the temporary assignment must be aligned with the OJT classification. When a contractor intends to transfer a trainee to another site for a short period of time, the hours trained off site will be credited to the project on which the trainee has been approved. Prior to any off-site training, the contractor is required to submit an *OJT Program Off-Site Training Approval Form* to the Office of Civil Rights & Labor Compliance detailing the training schedule. The contractor will remain eligible for reimbursement, provided the OJT Program Coordinator has signed this form. Copies of the form will be forwarded to the affected Resident Engineers.

Limited classroom training may also count towards training hours if needed for the specific job classification. Please contact the OJT Coordinator for more information.

For trainee monitoring purposes, the *OJT Weekly Progress Reports* should continue to be completed and submitted to the Resident Engineer on the primary job site during the off-site training period.

## TERMINATION

Trainees should be held to the same employee expectations and policies and procedures as other employees. The trainee may be terminated for just cause as long as the contractor is following their own policies and procedures for employee discipline.

The contractor should immediately notify the Resident Engineer and the OJT Program

Coordinator (802.917.8388) if there is a problem with the trainee, so that every effort can be made to take corrective affirmative action.

If a trainee is terminated or quits voluntarily before the training hours are completed, the VTrans OJT Coordinator will determine if the amount of training provided was sufficient to meet the requirement of the contract, or whether the contractor is required to enroll a replacement trainee.

## CERTIFICATE OF TRAINING PROGRAM COMPLETION

At the completion of the training program, the trainee will receive an *OJT Program Completion Certificate* as a record of his/her accomplishment. A copy of the certificate will be sent to the contractor and the Resident Engineer on the project. The trainee will also be encouraged to continue to work and pursue training in the highway construction field. Successful trainees may be eligible for more opportunities through the Office of Civil Rights & Labor Compliance.

## CONTINUED EMPLOYMENT AND TRAINING

We strongly encourage contractors to offer successful trainees continued employment, training and other opportunities for advancement. The VTrans Employment Diversity in Highway Construction (EDHC) program has funding for OJT graduates to use towards certification and other industry-related courses including CDL, OSHA, Qualified Signal Person and Basic Rigging, welding, and carpentry. Trainees and contractors can contact the OJT Program Coordinator for more information.

## TRAINING CLASSIFICATIONS

|   |                              |
|---|------------------------------|
| • Bridge Construction Trainee (BCT)               | 520 Hours . . . . . Page 8   |
| • Intermediate Bridge Construction Trainee (IBCT) | 520 Hours . . . . . Page 9   |
| • Advanced Bridge Construction Trainee (ABCT)     | 520 Hours . . . . . Page 10  |
| • Carpenter Trainee (CT)                          | 520 Hours . . . . . Page 11  |
| • Civil Engineer Trainee (CET)                    | 520 Hours . . . . . Page 12  |
| • Construction Supervisory Trainee (CST)          | 1040 Hours . . . . . Page 13 |
| • Equipment Operator Trainee (EOT)                | 520 Hours . . . . . Page 14  |
| • Field Engineer Trainee (FET)                    | 520 Hours . . . . . Page 15  |
| • Foreman Assistant Trainee (FAT)                 | 520 Hours . . . . . Page 16  |
| • Highway Construction Trainee (HCT)              | 520 Hours . . . . . Page 17  |
| • Quality Control Technician Trainee (QCTT)       | 520 Hours . . . . . Page 18  |
| • Traffic Coordinator Trainee (TCT)               | 520 Hours . . . . . Page 19  |
| • Truck Driver Trainee (TDT)                      | 520 Hours . . . . . Page 20  |

If the needs of a particular construction project will not support any of the established trainee classifications found in this manual, the contractor is encouraged to develop a program which will be more appropriate. Our office encourages creativity in developing training classifications to best meet the needs of the project as well as the interests and goals of the trainee. Any new or modified training program must be written by the contractor and reviewed and approved by the OJT Program Coordinator.



## BRIDGE CONSTRUCTION TRAINEE (BCT) 520 HOURS

The OJT will perform a combination of tasks on bridge construction projects, usually working in a utility capacity. Individuals will transfer from task to task as work requires under general supervision of a skilled bridge construction worker. Activities include but are not limited to:

|                   |                   |               |
|-------------------|-------------------|---------------|
| Laboring          | Guardrail/Fencing | Tying Off     |
| Carpentry         | Curbing           | Rebar         |
| Blasting/Drilling | Traffic Control   | Concrete Work |
| Welding           | Grading           | Pile Driving  |
| Working with Iron | Placement         |               |



A typical training program under this classification will consist of the following:

### a) Familiarization (30 hours)

- Safety
- Bridge layout – Blueprints
- Right-of-way lines, alignment stakes, grade stakes, witness stakes, boundary markers, bench markers and tie points
- Tools/Equipment
- Public Relations

### b) Form Building and Erection (200 hours)

- Safety
- Basic form design
- Construction, erection and placement of forms
- Placement of reinforcing steel

### c) Structural Concrete (100 hours)

- Safety
- Concrete materials
- Finishing concrete – pouring/setting

### d) Traffic Control (40 hours)

- Safety
- Control of traffic – public/construction vehicles

### e) Stripping/Salvage (40 hours)

- Safety
- Removal/Clearing of materials
- Grading and staking

### f) Structural Steel (90 hours)

- Safety
- Placement/Fastening
- Exposure to pile driving, welding and cutting, and minimum heavy equipment operation

### g) Clean-Up (20 hours)

- Safety
- Materials – Equipment maintenance
- Site cleanup

# INTERMEDIATE BRIDGE CONSTRUCTION TRAINEE (IBCT)

## 520 HOURS

This training classification can be used after completion of a Bridge Construction Trainee Program or equivalent. It is the second step of the BCT series, which leads to learning the necessary skills to become a bridge carpenter.

A typical training program under this classification will consist of the following:

**a) Familiarization (40 hours)**

- Safety
- Company policies/Procedures
- Tools/Equipment used in highway and bridge construction
- Maintenance of hand tools

**b) Structural Concrete (250 hours)**

- Safety
- Erection and placement of forms
- Reinforcing bars
- Finishing concrete/Curing
- Construction of forms
- Drainage structures
- Deck placement
- Stripping/Salvage

**c) Traffic Control (30 hours)**

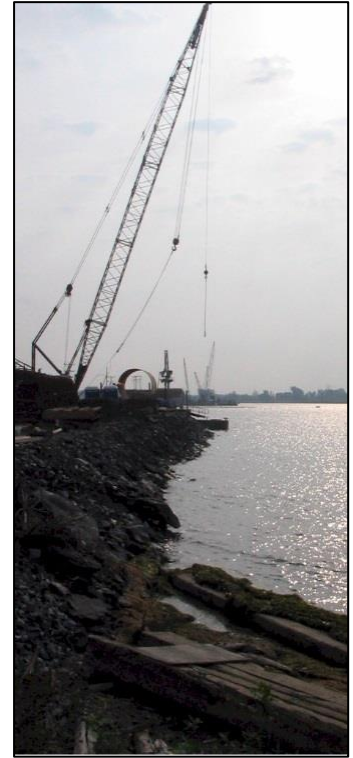
- Safety
- Public traffic/Construction traffic
- Sign erection and maintenance

**d) Concrete Demolition (100 hours)**

- Safety
- Tools and equipment
- Methods of removal
- Protection of surroundings

**e) Site Cleanup (100 hours)**

- Safety
- Placing topsoil/Seed/Mulch
- Equipment/Tool maintenance
- Disposal of material





## ADVANCED BRIDGE CONSTRUCTION TRAINEE (ABCT) 520 HOURS

This training classification can be used after completion of an Intermediate Bridge Construction Trainee Program or equivalent. It is the third step of the BCT series, which leads to learning the necessary skills to become a bridge carpenter.

A typical training program under this classification will consist of the following:

- a) Familiarization (20 hours)**
  - Safety
  - Company procedures
  - Tools/Equipment used in highway and bridge construction
- b) Concrete Demolition (150 hours)**
  - Safety
  - Tools and equipment
  - Methods of removal
  - Protection of surroundings
- c) Structural Concrete (200 hours)**
  - Safety
  - Form designs
  - Reinforcing bars
  - Finishing concrete/Curing
- d) Deck Removal and Replacement (150 hours)**
  - Safety
  - Stripping/Salvage
  - Metal grading with precast concrete replacement
  - Removal and clearing
  - Control of traffic



## CARPENTER TRAINEE (CT)

### 520 HOURS

The OJT will build rough wooden structures according to sketches or oral instructions. The trainee will examine specifications to determine dimensions of structures, measure boards, timbers or plywood using a framing square, measuring tape and ruler and will mark cutting lines on materials, using pencil and scribe. The individual will also saw boards and plywood panels to required sizes, nail cleats (braces) across boards to construct concrete forms and brace forms in place with timbers, cables, tie rods and anchor bolts for use in building concrete piers, footings and walls. The OJT will erect chutes for placing concrete and cut and assemble timbers to build trestles and cofferdams. The trainee will transfer from task to task as work requires under general supervision of the project supervisor and on-site foreman.

A typical program under this classification will consist of the following:

**a) Familiarization (60 hours)**

- Safety procedures
- Use of personal protective equipment
- Use of power and hand tools
- Materials selection
- Blueprint or construction plans reading
- Basic form design

**b) Applied Techniques of Highway Construction Carpentry (420 hours)**

- Pier, pile and cap formwork
- Decking formwork
- Parapet and hand railing formwork
- Endwall formwork
- Box culverts, inlets, and headwall formwork

**c) Stripping and Salvage of Forms for Re-Use (40 hours)**

- Stripping
- Cleaning material
- Separation and stacking of material



# CIVIL ENGINEER TRAINEE (CET)

## 520 HOURS

A Civil Engineer Trainee is the entry-level position for individuals with technical training in civil construction. A civil engineer will focus on developing skills in plan development, quality control, and site inspection. This engineer will take direction from project managers and supervisors to learn design considerations techniques and quality control procedures.

The Civil Engineer Trainee will perform activities under the supervision of a design professional to prepare to take on the role of civil engineer on heavy civil projects. A typical training program under this classification will consist of the following:

A typical program under this classification will consist of the following:

### a) Familiarization (20 hours)

- Company safety policies
- Construction Safety Introduction
- Safety presentation to staff
- Roles of different parties and people on site
- Review and understanding of project and development process

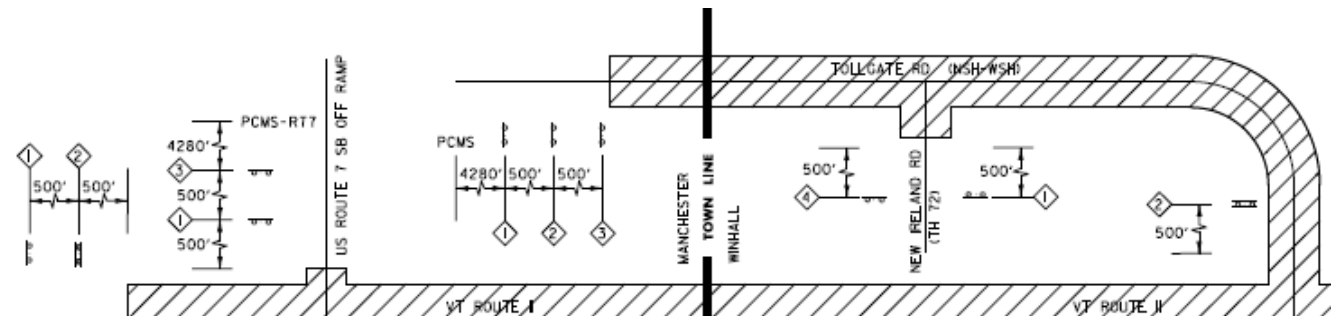
### b) Construction Quality Assurance Documentation (120 hours)

- Keeping a log of QA reviews
- Processing and tracking QA reviews
- Perform project QA review

### c) Plan Development and Quality Control (380 hours)

- Develop and compile design portion of construction work packages
- Use of Microstation and Inroads software
- Use of Estimator and Excel software for quality calculations and estimates
- Perform quality control checks

**Note:** This training classification was developed for design-build projects where there is an opportunity for the design firm associated with the contract to take on a trainee.



## CONSTRUCTION SUPERVISORY TRAINEE (CST)

### 1040 HOURS

The OJT will be trained to act in a supervisory capacity coordinating activities of work crews on highway and/or bridge construction projects. This training includes, but is not limited to:

- Learning company policies, procedures; jobs, and personnel functions to gain knowledge of all phases of highway/bridge construction tools and processes.
- Blueprints and layouts
- Topographical maps and surveying
- Scheduling
- Contractors' rules and regulations governing construction activities

A typical training program under this classification will consist of the following. Please see the note below about the special requirements for this training plan.

#### a) Familiarization (65 hours)

- Safety
- Company policies/procedures
- Equipment/Materials usage and maintenance
- Recordkeeping

#### b) Supervisory Responsibilities (225 hours\*)

- Scheduling
- Employee relations
- Conflict resolution
- Public relations
- Safety and first-aid
- Crew/Equipment coordination

#### c) Job Knowledge (750 hours\*)

- Safety
- Blueprint/Topographical map/Layout reading
- Use of transit
- Planning and layout of field office and grounds
- Layout and staking
- Site preparation
- Ground condition analysis and testing
- Excavation
- Drainage
- Pipelaying
- Subgrading and fine grading
- Erosion control
- Placement of concrete, asphalt, and granite
- Job site cleanup
- Traffic control

*\*The contractor is required to work with the Resident Engineer and OJT Program Coordinator to customize the CST training plan for the specific project that has training hours. The final training plan should specify the number of training hours for each subject.*



# EQUIPMENT OPERATOR TRAINEE (EOT)

## 520 HOURS

The OJT will learn and operate many types of construction equipment used on highway and bridge construction projects. Equipment used may include but is not limited to the following:

|             |                   |
|-------------|-------------------|
| Bulldozer   | Crane             |
| Roller      | Loader            |
| Compactor   | Oiler             |
| Backhoe     | Dump Truck        |
| Grader      | Earth/Rock Hauler |
| Pile Driver |                   |

A typical training program under this classification will consist of the following:

### a) Familiarization (40 hours)

- Safety
- Fueling/Lubrication/Hydraulic systems
- Operation of vehicle
- Vehicle capabilities and limitations
- Materials/Earth work/Site preparation
- Public relations

### b) Operation of Equipment (370 hours)

- Safety
- Grading
- Earth moving
- Rolling (compaction/ vibration)
- Trenching/Pipe laying
- Backfill/Curbing
- Rigging/Hoisting

### c) Maintenance (40 hours)

- Safety
- Maintenance of equipment (minor repairs/parts replacement)

### d) Project Support Activities (70 hours)

- Providing direct project support to project superintendent, project engineer, foreperson and other construction personnel, as required. This support will also involve off-vehicle activities.



## FIELD ENGINEER TRAINEE (FET)

### 520 HOURS

A field engineer is the entry-level position for individuals with technical training in civil construction. A field engineer will focus on developing skills in plan reading and site layout. The engineer will take direction from forepersons and supervisors to learn construction techniques and crew management skills.

The Field Engineer Trainee will perform activities under the supervision of a construction professional to prepare to take on the role of field engineer on heavy civil projects. A typical training program under this classification will consist of the following:

**a) Familiarization (25 hours)**

- Company safety policies
- Site-specific safety
- Heavy equipment introduction
- Roles of the different parties and people on site

**b) Documentation (100 hours)**

- Keeping a field book for records
- Measuring quantities for payment
- Job safety assessments
- Time cards for equipment and crews

**c) Traffic Control (45 hours)**

- Flagging
- Using the MUTCD
- Designing traffic packages with signage, cones, and flaggers
- Proper set up and tear down of traffic package

**d) Layout & Plan Reading (250 hours)**

- Plan reading to extract specifics
- Use of a pop level and stick ruler
- Use of a transit and grade rod
- Use of a GPS and data collector

**e) Construction Practices (100 hours)**

- Environmental stewardship and compliance
- Mass excavation and filling
- Pipe installation
- Concrete forming and pouring
- Road subbase and grading
- Paving and guardrail

## FOREMAN ASSISTANT TRAINEE (FAT) 520 HOURS

The OJT will be trained to act in a supervisory capacity, coordinating activities of work crews on construction projects. The trainee will become familiar with all types of heavy equipment, construction tools and processes, blueprints and layouts, topographical maps and survey scheduling, company policies and procedures, and job and personnel functions. The trainee will become knowledgeable in all phases of bridge construction.

A typical program under this classification will consist of the following:



### a) Familiarization (100 hours)

- Blueprint reading
- Right-of-way lines, alignment, grade and witness stakes, boundary markers, benchmarks and tie points
- Tools/Equipment
- Materials/Earthwork/Site preparation
- Company policies/Procedures - EEO/AA
- Recordkeeping
- Public relations

### b) Assistant Responsibilities (40 hours)

- Scheduling
- Crew/Equipment coordination
- Employee relations
- Conflict resolution

### c) Operation of Equipment (100 hours)

- Rolling (compaction/vibration) and pile driving
- Rigging/Hoisting
- Exposure to pile driving, welding and cutting and heavy equipment operation
- Equipment/Material usage and maintenance
- Maintenance of equipment (minor repairs/parts replacement)
- Backfill/Curbing
- Trenching/Pipe laying

### d) Job Knowledge (200 hours)

- Blueprint/Topographical map/Layout reading
- Use of transit, layout, and staking
- Site preparation
- Ground condition analysis and testing
- Drainage
- Subgrading and fine grading
- Erosion control
- Placement of concrete, asphalt, and granite
- Job site clean-up, excavation
- Traffic control

### e) Job Safety (40 hours)

- Traffic safety and first aid
- Structure safety and roadway safety

### f) Higher Skill Training (40 hours)

- Provides direct assistance to project superintendent, project engineer, and others as required.

# HIGHWAY CONSTRUCTION TRAINEE (HCT)

## 520 HOURS

The OJT will perform a combination of activities under the supervision of a skilled highway construction worker to become familiar with highway construction. These activities include but are not limited to:

|                     |                     |
|---------------------|---------------------|
| Traffic Control     | Curbing             |
| Carpentry           | Signing             |
| Guardrail/Fencing   | Paving              |
| Pipe Laying         | Concrete Structures |
| Grading             | Seeding & Mulching  |
| Blasting & Drilling | Clean-Up            |

A typical program under this classification will consist of the following:

### a) Familiarization (30 hours)

- Safety
- Layout, knowledge of right-of-way, alignment stakes, grade stakes, blueprints
- Public relations
- Tools/Equipment used in highway construction

### b) Traffic Control (40 hours)

- Safety
- Public traffic/Construction traffic
- Sign erection and maintenance

### c) Piping (80 hours)

- Safety
- Trenching
- Bedding
- Positioning, joining, aligning, and sealing pipe sections, including culvert and multiplate
- Backfill and compaction

### d) Concrete Structures (120 hours)

- Safety
- Box culverts, inlets and headwall form work, reinforcing bars
- Placing concrete
- Stripping and salvage (forms)

### e) Grading (140 hours)

- Safety
- Providing roadway stake-out assistance
- Grading and marking of stakes
- Rough/Fine grading of materials



### f) Surfacing (40 hours)

- Safety
- Mixing and placing concrete, asphalt, gravel, and other materials using hand tools and, where appropriate, minimum heavy equipment

### g) Curbing (40 hours)

- Curbs and sidewalk placement – granite, asphalt, and concrete

### h) Clean-up (30 hours)

- Safety
- Placing/Spreading loam
- Seeding and mulching
- Equipment/Tool maintenance



## QUALITY CONTROL TECHNICIAN TRAINEE (QCTT) 520 HOURS

The OJT will operate a nuclear gauge to monitor compaction and laydown of asphalt. The trainee will operate a coring rig, in cutting core samples of asphalt for comparison against lab densities. The individual will learn how to maintain required documentation and how to develop reports to demonstrate compliance with state and federal regulations.

A typical program under this classification will consist of the following:

**a) Familiarization (100 hours)**

- Safety
- State specifications for paving projects
- Overview of compaction testing and what the results mean
- Introduction to QC equipment

**b) QC Equipment Operation and Material Testing (300 hours)**

- Rolling patterns and how it affects compaction
- Basic concrete and asphalt aggregate properties

**c) Communication and Documentation (100 hours)**

- Communication of compaction results
- Documentation of test results
- Communication with roller operator/paving foreperson

**d) Care and Maintenance of QC equipment (20 hours)**



# TRAFFIC COORDINATOR TRAINEE (TCT)

## 520 HOURS

The OJT will act within a work crew at construction sites and will supervise all job site flag personnel. This individual will be responsible for all of the project's construction signage, blueprint reading and associated layout, proper setup and relocation of construction sign packages, arrow boards and variable message boards, including programming of variable message boards. The trainee will also become familiar with all types of asphalt paving, reclamation, grading, pipe installation, and fence and guardrail and will perform related duties.

A typical program under this classification will consist of the following:

### a) Familiarization (40 hours)

- Safety
- Knowledge of company policies and procedures
- Knowledge of Federal and state regulations
- Proper hand and sign signaling
- Public relations
- Recordkeeping

### b) Control of Traffic (40 hours)

- Knowledge of proper equipment and safe signing
- Use of radio equipment
- Control of construction equipment through work area
- Coordination of activities with proper management and supervisory personnel
- Daily start-up and shut-down involving safety equipment
- Maintenance of adequate level of supplies for daily use

### c) Supervisory Responsibilities (200 hours)

- Scheduling of all flag personnel
- Employee relations - recognition and motivation
- Conflict resolution
- Public relations
- Safety and first-aid
- Crew and equipment coordination

### d) Traffic Signage Familiarization (40 hours)

- Types of equipment and materials
- Maintenance, operation limitations and capabilities
- Fueling, lubricating, and servicing

### e) Traffic Control Job Knowledge (200 hours)

- Placing concrete barriers
- Safety and operating procedures
- Blueprint and topographical map reading
- Planning and layout of sign packages
- Excavating, drainage, and pipe laying
- Fence and guardrail
- Compaction and backfilling
- Subgrading, fine grading, and erosion control
- Placement of hot mix asphalt and hot mix asphalt curb
- Cold planing and reclaiming
- Removal of permanent construction signs and job site cleanup
- Temporary pavement markings



# TRUCK DRIVER TRAINEE (TDT)

## 520 HOURS

The OJT will learn to operate on and off work-site vehicle(s) with a GVWR (Gross Vehicle Weight Rating) of over 26,001 pounds and perform daily safety checks and maintenance on such vehicles. The trucks used for the traineeship can include dump trucks of all kinds (with or without the use of trailers with a GVWR of 10,000 pounds or less), tractor trailer trucks (both flatbed and box), and all off-road trucks such as CAT trucks.

A typical program under this classification will consist of the following:



### a) Familiarization (40 hours)

- Knowledge of company policies and procedures
- Performing daily external and internal vehicle inspection
- Air brake check and proper notation of problems found
- Job site hazards
- Working with traffic personnel and laborers in assisting backups on site
- Entering/Exiting job site safety
- Vehicle orientation, gear numbers, weight rating, special instructions, vehicles caps/ limitations, fueling, general operation
- Public relations

### b) Vehicle Operation (400 hours)

- On-road driving to and from pick-up and drop-off sites for materials
- Off-road driving
- Loading and unloading materials and equipment/Hazardous materials
- Securing and covering loads
- Working with equipment operators, spacing, signals used, and safety

### c) Maintenance (40 hours)

- Perform maintenance safely (minor repairs/parts replacement)
- Cleaning vehicle, i.e. windows, lights, cargo area, and placing proper placard on truck
- Checking and adding/changing vehicle fluid as necessary

### d) Related Activities & Project Support (40 hours)

- Collecting and submitting weight slips to office
- Filling out daily logs, fuel slips, and vehicle condition reports
- Providing project support to Project Superintendent or Foreman

**Note:** A contractor may require that a Truck Driver Trainee have a valid Class A or Class B CDL (Commercial Driver's License) and appropriate endorsements prior to the enrollment date for the OJT Program. At the least, it is expected that the TDT will have a Class A or B CDL Permit. The Truck Driver Traineeship is designed for persons with little or no professional driving experience, on or off road, who have already obtained their CDL Class A or B or who have recently obtained their CDL Class A or B permit.



## HIRING AND RETAINING A DIVERSE WORKFORCE

For more information about recruitment concerning **Hiring and Retaining A Diverse Workforce** please refer to the following document on our website:

<https://vtrans.vermont.gov/sites/aot/files/civilrights/documents/edhc/HiringandRetainingADiverseWorkforce.pdf>





## OJT PROGRAM FORMS

The OJT Program Forms can be found on the VTrans OJT Contractor Information website: <https://vtrans.vermont.gov/civil-rights/doing-business/contractors-center/information>. Please contact us if you need forms in a different format.

The following are links that will take you directly to each form:

- OJT Manual –  
<https://vtrans.vermont.gov/sites/aot/files/civilrights/documents/edhc/OJTManual.pdf>
- Good Faith Effort Log (for outreach and recruitment) -  
<https://vtrans.vermont.gov/sites/aot/files/civilrights/documents/edhc/OJTGoodFaithEffortLog.docx>
- Enrollment Form -  
<https://vtrans.vermont.gov/sites/aot/files/civilrights/documents/edhc/OJTEnrollmentFormFillable.pdf>
- Weekly Progress Report -  
[https://vtrans.vermont.gov/sites/aot/files/civilrights/documents/edhc/WeeklyProgressReport\\_Fillable.pdf](https://vtrans.vermont.gov/sites/aot/files/civilrights/documents/edhc/WeeklyProgressReport_Fillable.pdf)
- Example Completed Weekly Progress Report -  
<https://vtrans.vermont.gov/sites/aot/files/civilrights/documents/edhc/SampleWeeklyProgressReport.pdf>
- Off-Site Training Approval -  
[https://vtrans.vermont.gov/sites/aot/files/civilrights/documents/edhc/Off-Site%20Training%20ApprovalFillable\\_2020.pdf](https://vtrans.vermont.gov/sites/aot/files/civilrights/documents/edhc/Off-Site%20Training%20ApprovalFillable_2020.pdf)

OJT Participant Application (online form):  
[https://appengine.egov.com/apps/vt/aot/on\\_the\\_job\\_training](https://appengine.egov.com/apps/vt/aot/on_the_job_training)

## Training Special Provisions

This Training Special Provision supersedes subparagraph 7b of the Special Provisions entitled “*Specific Equal Employment Opportunity Responsibilities*,” and implements 23 U.S.C. 140 (a).

As part of the contractor’s equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The required number of employee traineeship hours to be provided by the Contractor is shown in the Contract Schedule of Prices. In the event that a contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor. However, the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor’s needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. **Prior to commencing construction, the contractor shall submit to the State highway agency for approval the number of trainees to be trained in each selected classification and training program to be used.** Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him/her on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeymen status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private resources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the State highway agency and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Apprenticeship programs registered with the U.S. Department of Labor, bureau of Apprenticeship and Training, shall also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intent of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions, such as office engineers, estimators, time-keepers, etc., where the training is oriented toward construction applications. Training in the laborer

classification may be permitted if significant and meaningful training is provided and approved by the division office. Some off-site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed at the bid amount for Item 634.10, Employee Traineeship, for each hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other sources do not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for off-site training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the off-site training period.

If, in the judgment of the contractor, a trainee becomes proficient enough to qualify as a journeyman before the end of the prescribed training period, and the contractor so employs such trainee, full credit and full payment to the contractor will be made provided that the period of training given, plus the length of employment as a journeyman in the classification for which trained, are equal to, or in excess of, the training period set forth in the approved training program. If the period of training given, plus the period employed as a journey person do not equal or exceed the training period set forth in the approved training program, the contractor will be paid the bid amount for Item 634.10, Employee Traineeship, for each hour the trainee was trained and employed as a journeyman by the contractor.

No payment shall be made to the contractor for the following reasons: failure to provide the required

training, failure to hire the trainee as a journeyman, a lack of good faith effort on the part of the contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will

begin his training on the project as soon as feasible after start of work utilizing the skill involved, and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor and Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision. In no case will the contractor pay trainees less than the prevailing rate for labor as shown in the contract wage decision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

## Sanction for Non-Compliance

Failure by the contractor to adhere to these Training Special Provisions may result in contract sanction as specified in **Section 11. Sanction for Non-Compliance, of the contract Specific Equal Opportunity Responsibilities.**

### Vermont Agency of Transportation Supplemental Specification - Training

## Sanction for Non-Compliance

a) If the Vermont Agency of Transportation finds the contractor or subcontractor in non-compliance with the terms of these specific training provisions, it shall issue a “show cause notice” and notify such contractor in writing that within 30 days a written plan outlining the steps that will be taken to bring such contractor into compliance must be submitted to the Vermont Agency of Transportation by the contractor. In the event that such contractor fails or refuses to submit the plan within the specified period or if the contractor does not exercise the corrective actions outlined in the plan, the Agency will commence enforcement proceedings under Executive Order 11246, as amended. Such actions could include:

- The recovery by the State Transportation Agency from the contractor of 1/10 of 1% of the contract award price or \$1,000.00, whichever sum is greater, as liquidated damages for each week the contractor fails or refuses to comply. If a subcontractor is in non-compliance, the recovery by the State Transportation Agency from the contractor, to be assessed by the contractor as a back charge against the subcontractor of 1/10 of 1% of the subcontract price, or \$500.00 whichever sum is greater, in the nature of liquidated damages, for each week that such party fails or refuses to comply; and/or

- The suspension of any payment or part thereof due under the contract until such time as the contractor or subcontractor is able to demonstrate compliance with the terms of the contract; and/or
  - The termination, or cancellation of the contract, in whole or in part, unless the contractor or subcontractor is able to demonstrate within a specified time compliance with terms of the contract; and/or
  - The denial to contractor or subcontractor of the right to participate in any future contracts awarded by the State Transportation Agency for a period of up to three years.
- b) If at any time after the imposition of sanctions 1 and 2 above, a contractor is able to demonstrate compliance with this Section, he/she may request the State Transportation Agency to suspend the sanctions conditionally, pending a final determination by the Agency as to whether the contractor is in compliance. Following the final determination, the State Transportation Agency will either lift the sanctions or reimpose them.
- c) The above sanctions for non-compliance will also apply to the “Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246).”

## Severability

The provisions of this section are severable, and if any of these provisions shall be held unconstitutional by any court of competent jurisdiction, the decision of such court shall not affect or impair any of the remaining provisions.







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